

Easy-Mix PU-90 Polyurethane Adhesive



High-strength | extremely fast-curing | high viscosity | pot life approx. 90 seconds

WEICON Easy-Mix PU-90 Structural Adhesive is a high-strength, extremely fast-curing, highly viscous adhesive, which can be sanded and painted over after approx. 30 minutes. It is weather-resistant, resistant to chemicals and temperature-resistant from -55 °C to +125 °C (-67 to +257 °F). WEICON PU-90 can be used to bond numerous materials such as composite materials, plastics, polyurethane, epoxies, polyester, metals, wood and ceramics to themselves and to each other with high tensile, shear and peel strength. PU-90 can be used in plastic technology, machine construction, model and mould making, metal construction, ship and boat building, carriage and vehicle construction, trade show and exhibition construction and in many other applications.

Characteristics

Base	polyurethane	
Colour	black	
Minimum shelf life	Humidity < 70 %	18 Mon.

Processing

Mixing ratio by weight	1:1	
Density of the mixture	1,30-1,35 g/cm³	
Gap bridging up to max.	0.1 mm	

Curing

Pot life	at 20 °C	90 sec.
Handling strength	(35 % strength)	5 min.
Working strength after	(50 % strength)	10 min.
Final strength	(100 % strength)	12 h

Mechanical properties after curing

Tensile strength	DIN EN ISO 527-2	21 N/mm²
Elongation at break (tensile)	DIN EN ISO 527-2	35 %
E-modulus (tensile)	DIN EN ISO 527-2	650-750 N/mm²
Hardness (Shore D)		66
Lap shear strength material thickn. 1,5mm DIN EN 1465		
Steel 1.0338 sandblasted		19 N/mm²
Stainless steel V2A sandblasted		17 N/mm²
Aluminium sandblasted		13 N/mm²

Thermal parameters

Temperature resistance	-55 °C to +125 °C	
Heat deflection resistance	DIN EN ISO 75-2	+65 °C
Temperature conductivity		0,186 mm²/s
Thermal conductivity	DIN EN ISO 22007-4	0,283 W/m·K
Heat capacity	DIN EN ISO 22007-4	1.268 J/(g·K)

Electrical parameters

Resistance	1,90 · 10¹²	
Dielectric strength	DIN EN 60243-1 (20°C)	>22 kV/mm

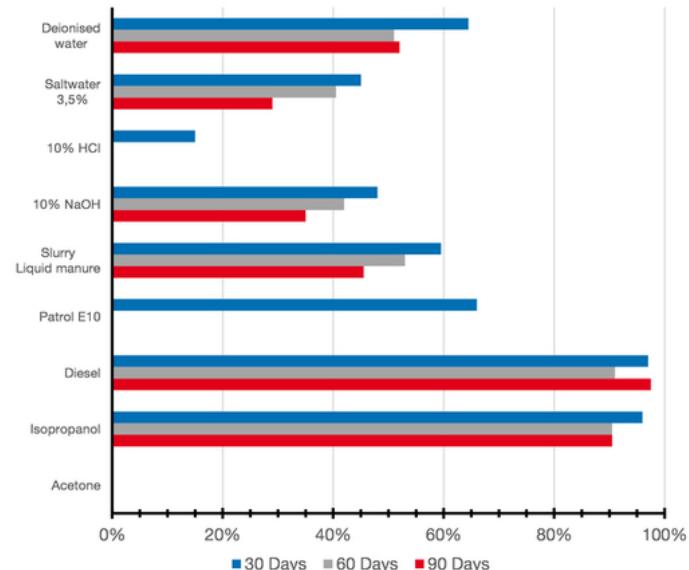
Approvals / Guidelines

ISSA Code	75.530.02	
IMPA Code	812987	
MIL-Spec	complies with	MIL-M-24041

Instructions for use

When using WEICON products, the physical, safety-related, toxicological and ecological data and regulations in our EC safety data sheets (www.weicon.com) must be observed.

Tensile strength after storage



Surface Pre-Treatment

For a flawless adhesive bond, surfaces must be clean and dry (e.g.

Note

The specifications and recommendations given in this technical data sheet must not be seen as guaranteed product characteristics. They are based on our laboratory tests and on practical experience. Since individual application conditions are beyond our knowledge, control and responsibility, this information is provided without any obligation. We do guarantee the continuously high quality of our products. However, own adequate laboratory and practical tests to find out if the product in question meets the requested properties are recommended. A claim cannot be derived from them. The user bears the only responsibility for non-appropriate or other than specified applications.

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clean and degrease with Surface Cleaner). Higher strengths can be achieved by further pre-treatment of the surfaces, such as roughening by blasting or grinding. Some low-energy plastics, especially PTFE and polyolefins etc., can only be bonded after special pre-treatment of the surfaces by e.g. fluorination, low-pressure plasma, corona, flame treatment, or similar.

Application

WEICON Easy-Mix products can be processed straight from the double cartridge by means of the included static mixer. Discard the first 5 cm of the adhesive bead. The adhesive is applied to just one side. The specified pot life refers to a material batch of 10 ml at room temperature. Larger batch quantities will result in faster curing. Higher temperatures also reduce the pot life and curing time. (General rule: every increase by +10 °C above room temperature results in a decrease of the pot life and curing time by half). Temperatures below +16 °C increase the pot life and curing time significantly. From approx. +5 °C and below, no reaction takes place.

Storage

Store in the unopened original container at a relative humidity of <70% and at a constant room temperature in a dry place. Avoid sources of heat and both direct and indirect sunlight. Once opened, the shelf life is reduced.

Scope of delivery

Quadro Mixing Nozzle A | Adhesive | Gloves | Primer

Accessories

- 10005237 Dispenser Easy-Mix D 50, 1 PCE
- 10010887 Processing Spatula, 1 PCE
- 10005236 Quadro Mixing Nozzle A, 1 PCE, blue
- 10068261 Dosing Tip, 1 PCE
- 10101999 WEICON Manual Dispenser, 1 x 1:1 | 2:1

Conversion table

(°C x 1.8) + 32 = °F	Nm x 8.851 = lb·in
mm/25.4 = inch	Nm x 0.738 = lb·ft
µm/25.4 = mil	Nm x 141.62 = oz·in
N x 0.225 = lb	mPa·s = cP
N/mm ² x 145 = psi	N/cm x 0.571 = lb/in
MPa x 145 = psi	kV/mm x 25.4 = V/mil

Available sizes

- 10031972 Easy-Mix PU-90 Polyurethane Adhesive, 50 ml, black

To the product detail page:



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